

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CN03/01001

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup> E04H15/44

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>7</sup> E04H15/44 15/40 15/46 15/34 15/32

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Chinese Patent Document

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI, PAJ, CNPAT

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US, B, 6557572(Jeh-kun Lah), 6, May. 2003(06.05.2003), the whole document	1, 2, 7
A		3-6
Y	JP, A, 11-141193(TWATA, Kohei et al), 25. May. 1999(25.05.1999), the whole document	1, 2, 7
A		3-6

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

### \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
13. Jul. 2004(13.07.2004)

Date of mailing of the international search report  
02 · AUG 2004 (02 · 08 · 2004)

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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/CN03/01001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6557572 B	06-05-2003	DE20022133U	03-05-2001
		GB2357785A	04-07-2001
		GB2357785B	29-05-2002
JP 11-141193 A	25-05-1999	none	

国际检索报告

国际申请号

PCT/CN03/01001

A. 主题的分类

IPC E04H15/44

按照国际专利分类表(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类体系和分类号)

IPC E04H15/44 15/40 15/46 15/34 15/32

包含在检索领域中的除最低限度文献以外的检索文献

中国专利文献

在国际检索时查阅的电子数据库(数据库的名称和, 如果实际可行的, 使用的检索词)

EPODOC, WPI, PAJ, CNPAT

C. 相关文件

类 型*	引用文件, 必要时, 指明相关段落	相关的权利要求编号
Y	US, B, 6557572(Jeh-kun Lah), 2003 年 5 月 6 日 (06.05.03), 全文	1, 2, 7
A		3-6
Y	JP, A, 11-141193(甲府方 等), 1999 年 5 月 25 日 (25.05.1999), 全文	1, 2, 7
A		3-6

☐ 其余文件在 C 栏的续页中列出。

☒ 见同族专利附件。

\* 引用文件的专用类型:

“A” 明确叙述了被认为不是特别相关的一般现有技术的文件

“E” 在国际申请日的当天或之后公布的在先的申请或专利

“L” 可能引起对优先权要求的怀疑的文件, 为确定另一篇引用文件的公布日而引用的或者因其他特殊理由而引用的文件

“O” 涉及口头公开、使用、展览或其他方式公开的文件

“P” 公布日先于国际申请日但迟于所要求的优先权日的文件

“T” 在申请日或优先权日之后公布的在后文件, 它与申请不相抵触, 但是引用它是为了理解构成发明基础的理论或原理

“X” 特别相关的文件, 仅仅考虑该文件, 权利要求所记载的发明就不能认为是新颖的或不能认为是有创造性

“Y” 特别相关的文件, 当该文件与另一篇或者多篇该类文件结合并且这种结合对于本领域技术人员为显而易见时, 权利要求记载的发明不具有创造性

“&” 同族专利成员的文件

国际检索实际完成的日期

13. 7 月 2004(13.07.2004)

国际检索报告邮寄日期

02. 8 月 2004 (02. 08. 2004)

国际检索单位名称和邮寄地址

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中国北京市海淀区西土城路 6 号(100088)

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授权官员



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国际检索报告  
关于同族专利成员的情报

国际申请号  
PCT/CN03/01001

检索报告中引用的 专利文件	公布日期	同族专利成员	公布日期
US 6557572 B	06-05-2003	DE20022133U	03-05-2001
		GB2357785A	04-07-2001
		GB2357785B	29-05-2002
JP 11-141193 A	25-05-1999	无同族专利	